# EXHIBIT 10

# CRYPTOCURRENCIES: OVERSIGHT OF NEW ASSETS IN THE DIGITAL AGE

## HEARING

BEFORE THE

## COMMITTEE ON AGRICULTURE
## HOUSE OF REPRESENTATIVES

ONE HUNDRED FIFTEENTH CONGRESS

SECOND SESSION

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EXCERPTED - MR. NESS' TESTIMONY FOLLOWS

are trying to entice people back into the country, because then the standards would really have to be lowered to do that. I think we have an opportunity now if we get ahead of the true flight, but that is an important idea around why we need some of the bright lines.

To that end, I did in some of my written testimony include some materials and a proposed regulatory framework that both talk about what the existing laws and how the existing laws treat these so-called utility tokens, and there is a 50-page memo on how the existing laws work. To avoid having to go through that 50-page memo type analysis with each and every one of these, I think the bright lines are really what is necessary.

There is a regulatory framework that we have been thinking a lot about how that would create that set of bright lines that would enable the regulators and the companies going out there to really know how to sort the good ones from the bad ones. I do think that starts with this test around how we in the investment contract analysis for regulating securities as securities in the primary offering, if they are being sold pre-functional—before they are fully functional. But coming up with ways to say that once they are fully functional, how do we let them now trade as commodities effectively, and the trading is important because as I said, this is the movement of value. To have value, it needs a price and the markets really are a necessary part of this. The fact that there are secondary markets is a key part of this. They need to be able to trade in those markets to establish price. They also need to be able to be used in their networks as non-securities, and so we need to come up with ways to say when they are being sold to investors as investments, let's treat them like securities. When they are being used in the network or they are being traded in the secondary markets, let's call them commodities.

Thank you.

[The prepared statement of Mr. Ness follows:]

PREPARED STATEMENT OF LOWELL D. NESS, J.D., MANAGING PARTNER, PALO ALTO OFFICE, PERKINS COIE LLP, PALO ALTO, CA

### *U.S. Regulatory Framework for Digital Assets*

#### Introduction

We support the regulatory mission of investor protection and full and fair disclosure. We also support aggressively dealing with fraudulent actors in the blockchain technology industry. We believe it is essential to both market participants and the regulatory community that bad actors are dealt with through targeted strikes and regulatory action. We also believe it is equally essential to provide clear guidance beyond enforcement actions to allow continued development and innovation around what many believe to be potentially transformational technology development. It is in that spirit that we welcome this engagement with the regulatory community toward defining a regulatory framework that best addresses market participant protection and continued growth and development of blockchain technologies.

Blockchain technology (also called "distributed ledger technology") allows the creation of a software ledger that is distributed, meaning many copies of the ledger exist and are automatically kept in sync such that no one actor can alter the ledger without employing a defined consensus mechanism among the actors. This technology allows assets to be traded on a ledger that is not maintained by a centralized "trusted" actor. Blockchain technology allows ledger transactions to occur immediately, immutably and transparently, without the need for reconciliation of multiple proprietary ledgers. This is, arguably, the most fundamental change to ledger technology since double-entry accounting. Double-entry accounting helped trading counterparties trust each other. Blockchain technology removes the need for centralized trusted intermediaries to act as the go between for trading counterparties.

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While the Internet enables the free flow of information, blockchain technology enables the free flow of value. More specifically, blockchain technology enables the creation of many types of digital assets, including digital currencies, digital goods and services, software tokens and digital securities (*e.g.,* tokenized debt or equity).

This memorandum addresses the regulatory framework for the application of U.S. securities laws and commodities laws to these various types of digital assets, with a focus on the treatment of utility tokens. Tokenized goods and services are non-fungible tokens that are merely intended to represent specific goods or services, so their regulatory status should simply follow from the regulatory status of the good or service they represent. Other digital assets require somewhat more complicated analysis to determine their regulatory status.

**Digital Currencies, Digital Securities & Utility Tokens**

At one end of the spectrum, digital currencies are fungible tokens that have no other marketed functionality than use as a medium of exchange or stored value. These types of tokens (*e.g.,* Bitcoin) are subject to various U.S. Federal and state as well as foreign money transmission laws, are treated as property under U.S. tax laws, and are treated as commodities under U.S. commodities laws. Offers and sales of digital currencies should not be viewed as securities under the *Howey* test, absent unusual facts (such as promising efforts to maintain secondary market liquidity or token architectural features like burning tokens intended to reduce supply and increase the value).

At the other end of the spectrum, digital securities are tokenized traditional securities (*e.g.,* debt or equity) or investment contract type securities that offer a direct financial return from an identifiable issuer. These types of tokens would clearly be securities and would generally not be subject to commodities laws or money transmission laws *per se.*

Utility tokens are intended to be used by users of a software network and do not represent an equity interest (or any other corporate obligation), but they do attract speculative resellers, which implicates the *Howey* test. The *Howey* case law is highly nuanced and, therefore, challenging to interpret, leading to uncertainty. As a general matter, U.S. Federal securities laws were developed and have evolved primarily for and around equity securities (and other corporate obligations). There is much less clarity around investment contract type securities, particularly investment contract type securities that offer no direct financial return, but nevertheless enjoy robust secondary markets.

The *Howey* test requires a reasonable expectation of profits. A purchaser may be led to expect profits either from a direct financial return (*e.g.,* an ownership interest in a business or a promise of payment) or from a rising price in secondary markets. Ordinarily, if there is no direct financial return, and the object being sold has never been sold before, there would be no reasonable expectation of profits. This is because a reasonable purchaser would not expect a novel product to have any secondary market liquidity. The fact that every team, every time, seems to be able to general an immediate secondary market for its newly minted utility token, is astonishing, but has become a fact of life. At this point, the expectation of profits from secondary market activity has become a given. It would be difficult to point to another phenomenon where this was the case. This is the first factor in the utility token analysis that is arguably unique.

An expectation of profits is not, however, sufficient to form an investment contract. The expectation of profits must be based on the efforts of others. Most investment contracts, including *Howey* itself, involve the promise of direct financial returns. When a promoter offers a financial return to the purchaser, the efforts of others continue for the life of the financial return, which would mean indefinitely in the case of an ownership interest in a going concern. When no direct financial return is offered, however, and the only expectation of profits comes from the hope of a rise in price in secondary markets, the efforts of the promoter are only relevant **so long as** the product is being developed by the promoter. This temporal qualification is the second factor in the utility token analysis that is unique and leads to the concept of mutability, discussed in our memorandum to the SEC dated March 26, 2018 regarding the Investment Contract Analysis of Utility Tokens. As discussed in that memorandum, the token itself is never a security, but the facts and circumstances surrounding the sale of the token likely constitute an investment contract while the token is in the development stage because the buyer's expectation of profits are based on the seller's efforts to complete development of the token. Once the token has been fully developed and the facts and circumstances no longer support an investment contract conclusion, the offer and sale of the token should be treated as the sale of any other commodity trading in spot markets. As a result,

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under the *Howey* test, token sale agreements could constitute investment contracts under some circumstances but not others.

Some would prefer to resist the implications of mutability by simply treating all tokens as securities forever. Treating all tokens as immutable securities, however, (i) would not be analytically consistent with existing law and (ii) would not allow tokens to be used for their intended purpose—access to products and services on a network, which would inevitably cause development to relocate abroad.[1] China, whose securities laws arguably are not as nuanced, took a binary approach to regulation and banned all token sales in China instead of adopting tailored protections that would enable the development of the technology to continue in China. We believe the law and guidance around what constitutes an investment contract should be clarified. We believe that the industry's and the regulators' interests are aligned in establishing clear rules and appropriate investor protections so that capital formation in blockchain technology is not derailed and development can continue to flourish in the United States.

**Proposed Regulatory Framework for Utility Tokens**

To remedy the uncertainty and confusion in this space, we are part of a group of academics, venture capital firms and law firms practicing in this area that has proposed the following regulatory framework to serve as the basis for a more detailed non-exclusive safe harbor that would help provide guidance to the industry on what constitutes an "investment contract" and how the investment contract law and guidance should apply to utility tokens with respect to primary sales, resales and use of the tokens for their intended purposes. Similar to the steps the SEC took by putting in place Regulation D, a non-exclusive safe harbor to address the uncertainty caused by *SEC* v. *Ralston Purina* in the private placement arena, we believe the proposed framework outlined below could be codified in a no-action letter or series of no-action letters that could ultimately lead to a rulemaking around a safe harbor that will assist in relieving the regulatory uncertainty around utility tokens. The goals of the proposed framework are to (i) establish clarity for the industry, (ii) permit use of tokens for their intended purposes (*i.e.,* on their software platform) and (iii) establish appropriate investor protections for both primary sales and resales of tokens, with emphasis on eliminating trading manipulation.

The industry's need for clarity is obvious. Currently, the vast majority of token sales are smaller token sales that have not been reviewed by counsel or that are merely attempting to follow precedent transactions in a highly nuanced area with varying models and no bright line rules. The regulators would also benefit from clarity. The proposed framework would require affirmative consent to jurisdiction, which has been challenging in light of the global and distributed nature of token sales. The proposed framework allows regulators to (i) define the contours of jurisdiction (and therefore responsibility), (ii) avoid the incongruent result of defining all tokens as securities (while tokens have security-like characteristics at one stage, the regulatory scheme must also permit use of tokens for their intended purposes) and (iii) provide an efficient structure for continued capital formation.

The proposed framework is largely based on the application of existing case law and regulatory principles, such as Rule 144 and Rule 701, to tokens, but proposes bright lines to clarify existing case law and regulation in a way that is practical and useful for all constituents. The proposed framework has been vetted by, and has the support of, many of the key players in the industry. We believe the proposed framework works well from the perspective of both industry and the regulators by balancing market participant protections and capital formation.

In general, offers and sales of tokens meeting the specified conditions would not be deemed securities transactions (except for purposes of application of general anti-fraud and manipulation rules, such as Rule 10b–5) once the tokens have achieved either full functionality or full decentralization (as described below) and may be exchanged as non-securities in secondary markets subject to the general anti-fraud and manipulation rules of each of the CFTC and the SEC. Token sellers would, however, impose certain investor protection requirements tailored to each stage. The no-action letter(s) and any eventual safe harbor would be non-exclusive as there will be tokens clearly purchased for consumptive purposes, such as non-fungible tokenized goods and services. The principles of the proposed framework are as follows:

> **Pre-Functionality**—Until the token achieves full functionality, offers and sales of tokens would generally constitute investment contract type securities under

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[1] For example, a social network that uses a token as a micro payment for a micro task like submitting a blog post, would be engaged in the unregistered and, presumably, non-exempt sale of a security if the token were a security.

*Howey,* unless a reasonable purchaser is purchasing with consumptive intent.[2] In this case, the token should generally be treated as a security unless use of the token (as opposed to resale) is reasonably certain. As such, this stage would include the following features:

*Primary sales*—Existing securities laws would apply to primary sales of the token. Primary token sale agreements would continue to be generally treated as securities based on the investment contract analysis under *Howey.* Primary sellers of tokens would be able to rely on available exemptions from registration (*e.g.,* Rule 506(b), Rule 506(c), Regulation S, Rule 701) and the SEC would retain full regulatory authority to enforce violations under existing Federal securities laws.

*Resales*—Any resales or assignments of the primary token purchase agreement, which is the security under *Howey,* by purchasers or affiliates of the token creator would also need to rely on existing resale exemptions under the securities laws. Resales of the token would also be subject to the special resale lockup and resale volume restrictions described below.

*Use for Intended Purpose*—Tokens would be able to be earned or used as intended through the network, so long as either (i) resale is not possible,[3] or (ii) the network on which the tokens can be used will be shut down within some reasonably finite period, say 6 months (*i.e.,* these are testnet tokens that have no resale value).

**Full Functionality**—Once the token achieves full functionality, offers and sales of tokens would generally not constitute investment contracts under *Howey.* Software networks, however, generally require ongoing updates and upgrades, so it may be appropriate to create limited but ongoing investor protections.[4] As such, this stage would include the following features:

*Primary Sales*—Primary sales of tokens below the Per Purchaser Limit (described below) would be able to be made without being subject to lockup or volume restrictions. Larger purchasers, however, would need to be accredited investors and are subject to the special resale lockup and resale volume restrictions described below. Tokens would be able to be gifted or otherwise distributed to users, service providers, strategic partners and other participants without an exchange of money, including mining, also without being subject to lockup or volume restrictions.[5]

*Resales*—Tokens would be able to be traded on exchanges or resale platforms as non-securities, other than for purposes of the general anti-fraud and manipulation rules, such as Rule 10b–5.[6]

*Use for Intended Purpose*—The token would be able to be earned or used on the network for its intended purpose (*i.e.*, on their software platform) without being subject to lockup or volume restrictions.

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[2] Consumptive intent, as opposed to investment intent, would generally be established if the purchaser is only able to use the token for its intended purpose and is not able to resell the token for profit. The existence of consumptive intent was a key determinant, for example, in *United Housing Foundation, Inc.* v. *Forman,* 421 U.S. 837 (1975).

[3] During this stage of token development, we believe that resale should either be extremely unlikely (*i.e.,* in the case of testnet tokens) or effectively impossible. More practical (*i.e.,* less stringent) resale lockup mechanics may be more appropriate for tokens that achieve full functionality.

[4] Ongoing software updates and upgrades constitute ongoing efforts of others under *Howey,* but they are not likely to rise to the requisite level of efforts to form an investment contract. The case law is particularly challenging to apply to the facts in this area, which makes it difficult to determine whether investor protections should apply. Nevertheless, we believe that limited ongoing investor protections, even at this stage of token functionality, are essential in ensuring that capital raising is not derailed in this industry by pump and dump or get rich quick schemes taking advantage of immediate liquidity in secondary trading markets for tokens.

[5] For equity securities, we would typically consider many of these non-monetary issuances of stock to be "sales." For tokens, there are strong policy objectives around bolstering the use of the tokens for their intended purposes. As such, non-monetary transfers of tokens for the purpose of seeding potential users to drive network adoption or for purposes otherwise related to the token's usage should be permitted. To the extent a so-called "airdrop" is announced in advance as a way to drive up the trading price of the token associated with the blockchain on which a new token is being airdropped, we would consider this a marketing practice inconsistent with the safe harbor.

[6] There are many variations in the market on token trading platforms, from true peer-to-peer to decentralized exchanges that provide information supporting peer-to-peer trading or, in some cases, matching engines, but that do not take custody of tokens, to hosted-wallet exchanges running full services as an exchange. How to handle exchanges and the mechanics of our proposal will need significant further discussion with the Staff. We do not believe, however, that it would be appropriate to require all exchanges trading fully functional tokens to be registered as Alternative Trading Systems. We believe it is essential to apply general anti-fraud and manipulation rules to these open exchanges, but it would be counterproductive to treat them as ATS's with inapposite rules developed around equity securities and other corporate obligations.

**Full Decentralization** (Protocol Tokens)[7]—If a token achieves full decentralization (not all will), the token would fall entirely outside of *Howey* since there is no longer an issuer or promoter delivering ongoing software updates or upgrades that could potentially constitute the requisite efforts of others under *Howey*. As such, a token that achieves full decentralization would be not be deemed a security for any purposes other than the general anti-fraud and manipulation rules, such as Rule 10b–5.

*Key Defined Terms*

*Full Functionality*—A token achieves full functionality when a token holder can use the token for its intended purpose (marketing test), or a token holder can use the token in some meaningful way (qualitative use test), or the network in which the token is to be used is fully functional in accordance with its whitepaper (operational test), or the token's consensus mechanism is working and blocks are being published (layer 1 protocol token test). The foregoing are examples of functionality criteria, but there may be other indicia of functionality that require further discussion in the context of a specific no-action letter. Protocol tokens (*i.e.,* tokens that allow other developers to build application tokens on top of the protocol token network) should be deemed to have immediate full functionality when the protocol tokens can be used for their intended purpose by developers even if the applications have not been developed yet, while application tokens would require their marketed features to be built before achieving full functionality.

*Per Purchaser Limit*—This could be a dollar limit akin to crowdfunding concepts, but would make more sense under *Howey* as a limit that indicates consumptive intent. Each primary token seller could establish a limit based, for example, on the number of tokens a user might use within a given period of time. In some cases, tokens are meant to be purchased by developers who are building other applications that will make use of the tokens and will need a larger quantity of tokens for their separate development project than would a typical user.

*Full Decentralization*—A token achieves full decentralization when the token creator no longer has control of the network based on its ability to make unilateral changes to the functionality of the tokens, or based on the number of network nodes controlled by the broader community, or based on the code being forkable and open source, or based on it being a permissionless network (any node can join), or based on affiliated hashpower (proof of work), or based on affiliated holdings (proof of stake). Again, these are just examples of indicia of control criteria that require further discussion in the context of a specific no-action letter.

*Primary Token Seller Conditions for Safe Harbor*

*Special Resale Lockup and Resale Volume Restrictions*—Primary sales other than for fully decentralized protocol tokens (*i.e.,* for either Pre-Functionality or Full Functionality tokens), would need to include a lockup that permits use but not resale for the period ending on the later of (i) 6 months following purchase, and (ii) achievement of full functionality. In addition, purchasers and affiliates of the token creator would need to agree to resale volume limitations.

*Consent to Jurisdiction*—Primary token sellers would need to consent to jurisdiction of the applicable regulators.

*Consent to Anti-Fraud Rules*—The primary token seller would need to also agree to the application of the general anti-fraud and manipulation rules, such as Rule 10b–5 under Federal securities laws with respect to any tokens sold under all circumstances.

*Public Disclosure*—Any information that the primary token seller provides regarding features and use of the network would need to be made publicly available. To achieve full functionality, a white paper, superseding any prior white paper, would need to be published detailing present functionality and would need to focus on present features with only limited and very generalized discussion of future features, if any. Other disclosures may be appropriate and would need to be discussed in the context of a specific no-action letter.

*Public Marketing*—The token seller would not be permitted to market the token as an investment, but would be able to provide disclosures consistent with Rule 506(c) and Rule 134. Any marketing materials made public would only be able to relate to the token's functionality, not its resale value.

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[7] ETH is a good example of this type of protocol token that has become so decentralized it should not be deemed a security. For clarity, ETH is the protocol token for the Ethereum network, so this safe harbor provision would apply to ETH, but not necessarily to all ERC20 tokens running on top of the Ethereum network unless an ERC20 token is itself a protocol token. Also, for clarity, a protocol token may qualify as a token with full functionality irrespective of whether it has achieved full decentralization.

*Legends/Smart Contracts*—Primary token seller would need to enforce lockups.

*Token Features*—The tokens would not (i) have one or more features that make them a "security" under one of the other concepts in the definitions under the 1933 Act or 1934 Act, or (ii) constitute an (a) ownership interest, (b) equity interest, (c) a share of revenue, profit and/or loss, or assets and/or liabilities, (d) status as a creditor or lender, (e) claim in bankruptcy, (f) holders of repayment obligations, or (g) right to convert into an investment interest, all with respect to the token project or network application, or any legal entity.

### Exchange Conditions for Safe Harbor

The conditions for an exchange to list a utility token as a non-security requires further discussion in the context of a specific no-action letter, including with respect to (i) the exchange's role regarding FinCEN KYC/AML regulations; (ii) the exchange's role relating to resale limitations on tokens; and (iii) consent to jurisdiction for enforcement of general anti-fraud and manipulation rules.

### Reseller Conditions for Safe Harbor

Resellers would need to comply with any lockup and volume limitations.

Resellers would need to be subject to the general anti-fraud and manipulation rules, such as Rule 10b–5.

### Conclusion

We believe that the above regulatory framework ensures the goals of investor protection, clarity for market participants and support for blockchain technology. While the SEC retains significant jurisdiction under the proposal, the CFTC would also retain the ability to regulate fraud and market manipulation in the token spot markets, in addition to its full authority to regulate any derivative token markets. FinCEN remains the primary regulator with respect to all KYC/AML requirements, and the FTC would also have jurisdiction for any consumer protection actions associated with misleading advertising.

<div align="center">ATTACHMENT</div>

March 26, 2018

**To:**    WILLIAM HINMAN, *Director,* Division of Corporation Finance
AMY STARR, CHIEF, Office of Capital Markets Trends
VALERIE SZCZEPANIK, *Assistant Director, Head* of the SEC Distributed Ledger Technology Working Group
**From:**   Perkins Coie LLP
**Re:**    *Investment Contract Analysis of Utility Tokens*

This memorandum discusses whether and under what circumstances so-called "utility tokens" would be securities as defined under the Securities Act of 1933, as amended (the "**Securities Act**").[1]

### Executive Summary

In *Howey*[2] and its progeny, including the cases discussed in the DAO Report,[3] the Securities and Exchange Commission (the "**SEC**") and the courts have laid out the characteristics of an "investment contract," emphasizing that the analysis of what is and is not an investment contract can be based on the facts and circumstances surrounding each offer and sale. Inherent in any analysis based on facts and circumstances is the reality that the analysis may yield a different conclusion at different points in time as circumstances change. In the case of tokens, and the underlying blockchain technology, the market dynamics have, in fact, changed over time, as market participants have adjusted to a better understanding of both the technology and the applicable regulatory requirements. Currently, it is widely accepted that a pre-functionality sale of tokens may well constitute an "investment contract,"

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[1] While other U.S. securities laws have slightly different, and in some cases broader, definitions of a security, the most immediate concern for utility tokens is whether a token sale to the general public may constitute a violation of Section 5 of the Securities Act. Outside the United States, except for Canada, we have not run into a jurisdiction where the securities laws would apply the investment contract test discussed in this memorandum according to local counsel. So far, utility tokens have been deemed non-securities in places like Switzerland, Singapore, Hong Kong, Bermuda, the Cayman Islands, and the British Virgin Islands, among others.

[2] *SEC* v. *W.J. Howey Co.,* 328 U.S. 293 (1946) (hereinafter, "***Howey***").

[3] *Report of Investigation Pursuant to Section 21(a) of The Securities Exchange Act of 1934* (Exchange Act Rel. No. 81207) (July 25, 2017) *https://www.sec.gov/litigation/investreport/34-81207.pdf* (hereinafter the "**DAO Report**").

and hence a security, within the meaning of Section 2(a)(1) of the Securities Act. This conclusion flows from the likelihood that a reasonable purchaser expects to profit in the secondary market for the tokens based on the efforts of the token seller to build the network or application in which the token is used. Accordingly, most market participants are initially purchasing a pre-functionality token sale agreement, which is offered and sold in accordance with Rule 506(b), Rule 506(c) or Regulation S, and which represents a right, at a future time, to delivery of utility tokens. In this context, the pre-functionality token sale agreement is the security, and it is subject to the resale restrictions imposed by Regulation D or other applicable exemptions, under the Securities Act. At the point at which the utility tokens achieve a sufficient level of functionality, such that their value is no longer dependent on the efforts of others, the pre-functionality token sale agreement is effectively extinguished and the holder thereof receives delivery of the tokens. A token by—itself is never an investment contract—Dogecoin [4] is simply a meme that can be transferred via blockchain operations. The investment contract arises from the understanding as to how the token will be developed into something of useful value. In this memorandum we discuss the legal analysis supporting our views with respect to the legality of these transactions and the legal status of the tokens, both pre- and post-functionality. We also discuss more broadly the legal framework in which token sales take place.

The key difference between (i) an equity offering or the forward sale of an extant commodity and (ii) an offering of utility tokens is the fact that equity is inherently a security by its nature and extant commodities are non-securities by their nature and that nature never changes. Equity fundamentally represents a right to a share of the profits of the issuer, so equity securities never "transform" from a security to a non-security because their fundamental nature does not change. The treatment of a contract as an investment contract, and hence as a security, however, is entirely based on a test that is driven by the facts and circumstances at the time of the offer and sale. Thus, it is possible for a contract for the sale of tokens to be an investment contract under one set of circumstances, while a subsequent contract for the sale of the same tokens is not an investment contract when sold under different circumstances. In this case, the transformation is not *de jure,* but arises from a change in the facts and circumstances, *i.e., ipso facto.* Since one of the key facts underpinning the efforts of others element set out in *Howey* is the promoter's efforts to build functionality, there may well be a different result with respect to an offer and sale made at a time when functionality exists, *versus* at a time when it does not. Indeed, if tokens are delivered to the pre-functionality token purchasers after **full functionality** has been created, the efforts of others element would no longer be met under *Howey,* and any subsequent resale of the tokens should not constitute an investment contract.

If we assume that the expectation of profits prong under *Howey* is always met based on today's frothy secondary markets, and if we ignore the other prongs of the test, the only remaining question is whether the expectation of profits is sufficiently based on the efforts of others. The courts use objective criteria to determine when a reasonable purchaser expects to profit on the efforts of others, not the subjective mind set of each purchaser. Thus, even if token purchasers currently may be described as irrationally exuberant, meeting the *Howey* test is within the control of the token seller because the test is objective not subjective. It follows that there is a "right way" for token sellers to construct tokens and conduct token sales, initially as a security, but once the token has achieved full functionality, it should be treated as a non-security that will ultimately trade on spot markets regulated under the anti-fraud rules administered by the CFTC.

In addition to being analytically inconsistent with existing law, categorizing tokens immutably as securities will mean that tokens cannot be used for their intended purposes in the United States. Securities cannot be used in the way utility tokens are intended to be used (*e.g.,* as micro payments for micro tasks on a social network). From a policy perspective, it is important that we apply our securities laws in such a way that inapposite regulation does not cause today's highly mobile workforce to develop these technologies abroad (as many already have) if utility tokens cannot be used for their intended purposes in the United States. While regulators must be mindful of containing the highly speculative and frothy market that currently exists, in which resale motives may predominate, use motives are gaining traction. As use of tokens grows, and as the novelty wears off, we expect that circumstances may well change again to the point where the irrational exuberance has subsided and there is a more balanced view of tokens as merely tools for interacting with various software platforms and applications.

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[4] *http://dogecoin.com/.*

Policy objectives aside, and whether or not a less frothy future state comes to pass, this memorandum addresses the analytical basis for the appropriate treatment of token sales under existing law.

**Detailed Analysis**

*A. Definition of Utility Token*

In October 2008, the Bitcoin whitepaper[5] introduced a new currency based on distributed ledger technology, also known as the Bitcoin Blockchain. Currency was the first use case for this underlying technology. Other use cases include using cryptographically secure distributed ledgers to track and trade traditional debt and equity securities, or any other tangible or intangible asset, good or service. This memorandum does not cover:

(1) Digital Securities—meaning (i) any token that represents or otherwise enables a blockchain transfer of a share of stock, note or other type of security explicitly included in the definition of "security" in the Securities Act and (ii) any token that would constitute an (a) ownership interest, (b) equity interest, (c) a share of revenue, profit and/or loss, or assets and/or liabilities, (d) status as a creditor or lender, (e) claim in bankruptcy, (f) holders of repayment obligations, or (g) right to convert into an investment interest, all with respect to the token project or network application, or any legal entity;

(2) Digital Currencies—meaning fungible tokens that have no other marketed functionality than use as a medium of exchange or stored value;[6] or

(3) Tokenized Goods and Services—meaning each token represents the right to a specific good or service that would often not be perfectly fungible with any other token.[7]

This memorandum covers utility tokens, defined as fungible tokens that have some software-based functionality beyond mere use as a medium of exchange or stored value, although typically the tokens also have those currency-like properties. The value of these utility tokens should be derived from their use in a smart contract or other application automating the payment and delivery of goods or services, including access to decentralized networks.

*B. Token Sale History and Evolving Model*

A large number of token sales of so-called "alt coins" occurred in 2014 and 2015. These were typically coins, based on the software code for Bitcoin, which is open-source software accessible to anyone. Many of these early tokens were digital currencies, although over time these tokens were used in more novel ways as part of a software network or application and became utility tokens (as defined for purposes

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[5] Satoshi, Nakamoto, *Bitcoin; A Peer-to-Peer Electronic Cash System, www.Bitcoin.org,* available at *https://bitcoin.org/bitcoin.pdf.* (last visited March 22, 2018).

[6] Digital currencies, like Bitcoin, would generally not be securities unless there are somewhat unusual facts and circumstances causing the coin to fall within the definition of a security (*e.g.,* if the coin's promoter builds certain features into the coin like diminishing supply or promises significant actions that would make the coin more valuable in the future). Typically, digital currencies are complete and useful as currency immediately upon creation of the first coin and do not promise any further development of features or functionality or actions to make them more valuable in the future. Even if the coin is marketed as an investment (as physical gold coins often are, for example), it would not be a security unless the expectation of profits is based on the efforts of others.

[7] Non-fungible (or less fungible) tokenized goods and services do not pose the same trading issues and easy resale profit opportunities as fungible utility tokens. By definition, the consumptive intent of the purchaser is patently obvious with respect to this type of token. In this case, the token can be abstracted away and its status as a non-security simply follows the non-security status of the underlying good or service. If the presale of a Tesla, for example, had used distributed ledger technology to track the identity of holders of the presale rights to the Tesla, the token purchasers would have had such clear consumptive intent that the tokens should not have been deemed securities even if such rights had been traded on an exchange while the car was under development. In this case, the token could either represent a customized car (*i.e.,* a nonfungible token), or it could represent a fungible currency value only redeemable for a car to be selected by the token holder in the future (akin to a gift card). Either way, the consumptive intent is clear. Tokenized concert tickets would be another example of this type of token, where there is a fixed supply of tickets and initial sales are likely to be virtually exclusively to and between resellers, but the tickets will ultimately be purchased, for the most part, by the end users who go to the concert. In the case of concert tickets, of course, it is also possible for the tokens to be perfectly fungible if the concert is all open seating, for example, so the touchstone for this type of token is the clarity of the consumptive intent of the ultimate end use purchasers. Of course, as with digital currencies, the offer and sale of this type of token could still meet the investment contract test if, for example, the tokens are coupled with a management contract like the one present in the *Howey* case.

of this memorandum). In 2014 and 2015, market participants believed that as long as these alt coins did not pay any sort of financial return, and did not represent a share of any company, similar to Bitcoin, they should not be treated as securities. Over time, the market cooled as appetite faded for new tokens that offered little in true functionality other than use as a currency, and use began to rise for the alt coins that included significant functionality in addition to use as a currency. In 2017, there was a resurgence of token sales based on the advent of more capable token technology. The ERC20 token protocol, as well as several others, now embed executable code into each token (often referred to as smart contracts), which allows developers to tokenize anything that software can create. These second-generation tokens can be said to be tokenized software products or APIs (application programming interfaces) that perform a function in addition to acting as a medium of exchange or stored value.

Initially, these new utility tokens were thought of by market participants as the sale of products in development that could follow the Kickstarter crowd sale model, so long as they continued to avoid paying any sort of financial return or share of ownership of a company or project. The offers and sales were made at a time when the market for tokens was untested and it could not be said that there was a built-in reasonable expectation of profits associated with resale because secondary markets were not assured.[8] Participants in the offers and sales tended to be technologists, developers, software users, and innovators. A reasonable amount of technological know-how was required just to be able to participate in a token sale. Means of holding tokens became more user friendly, including in online wallets, and means of exchanging one token for another, including on token exchanges, were made more reliable and simplified.

Over time, as the development of robust secondary markets became more and more of a given, market participants began to evolve the model to take into account the changing market conditions. Specifically, it became apparent that the offer and sale of tokens potentially implicated the Federal and state securities laws and market participants started to apply the *Howey* test to determine whether the tokens might properly be viewed as securities. This in turn led to delivering increasingly functional tokens at the time of a public token sale to offset the increasingly apparent expectation of profits associated with secondary trading (as opposed to use of the token) that began to emerge.

Today, as discussed below, while there are many token sales that do not follow best practices, market participants seeking to follow best practices generally follow a model where, before the tokens are fully functional, the sale of the tokens is conducted under an exemption from the registration requirements of the Securities Act and the proceeds are used to build functionality into tokens that will later be distributed to the pre-functionality purchasers. Typically, this is effected through the use of a pre-functionality token sale agreement that is not transferable and must be held indefinitely. The tokens are not delivered to the pre-functionality purchasers (and, therefore, do not begin trading on any exchanges or in peer-to-peer wallets) until the system for using the tokens becomes fully functional. Once full functionality is achieved, the token seller delivers the tokens to the pre-functionality purchasers and often conducts a second sale of the fully functional utility tokens to the public as a non-security.

*C. Overview of Securities Law Analysis*

The Securities Act regulates the **offer and sale** of securities. Once it is established that an instrument is a security within the meaning of the Securities Act, this transactional regulatory regime requires that each offer and sale of a security be registered or exempt from the registration requirements of the Securities Act. For current purposes, the threshold question is whether the instrument or arrangement meets the Securities Act's wide-ranging definition of "security." As discussed in the Dao Report, the applicable test then is whether the instrument or arrangement by which the offers and sales of utility tokens are made would constitute an "investment contract" under *Howey*. This is a multi-factor test based on facts and circumstances that must be analyzed with respect to the instrument or arrangement as of the time of each offer and sale. Facts and circumstances can and do change over time, so the results may be different, even for the same token, depending on when the offer and sale is made.

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[8] Generally, when a new team markets a new product or service, it is extremely unlikely for any sort of secondary market to develop on its own. It normally requires promotional efforts over a long period of time to gain any sort of traction and most projects fail to ever get a secondary market to develop. It cannot be said that a reasonable purchaser was expecting to profit in secondary markets at this point in the history of token sales.

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In most cases, under present market conditions,[9] the pre-functionality sale of tokens may well be a securities transaction under the Securities Act based on the investment contract analysis under *Howey*.[10] Once full functionality has been incorporated into the technology underlying the token, the token is a commodity trading on spot markets accessible to the public, which are subject to the anti-fraud rules enforced by the CFTC described below. For these purposes, "full functionality" is not intended to mean that merely some utility exists but rather that the requisite quantum of functionality exists such that the efforts of the promoter or others to deliver additional functionality do not form the basis for a reasonable purchaser's expectation of profits in purchasing the token. The requisite quantum of functionality is further discussed below.

Of course, the circumstances could change again in the future, as the novelty wears off, and a pre-functionality crowd sale structure could work again, if and when it becomes clear that purchasers have switched back to purchasing primarily for consumptive purposes rather than resale (as is the case with Kickstarter campaigns). In addition, even under present market conditions, token sellers may decide to take certain steps to ensure use rather than resale, which would also change the analysis. In such a case, the *Howey* test would arguably not be met if **either** there is not sufficient expectation of profits because the token is generally being purchased for consumptive purposes **or** the expectation of profits is predominantly based on variables exogenous to the efforts of the promoter(s) of the token.

*D. Description of the Pre-Functionality Token Sale Agreement*

Although pre-functionality token sale agreements may be executed with differing characteristics, for purposes of this memorandum, we assume the pre-functionality token sale agreements will have the following common characteristics:

- The purchaser pays to the seller the purchase amount (which may be denominated in fiat currency, such as U.S. dollars, or digital currency, such as Bitcoin) on or about the date on which the pre-functionality token sale agreement is executed.
- In consideration of the purchase amount, the seller agrees to deliver to the purchaser a number of tokens equal to the purchase amount divided by a certain price on or about the time the seller conducts a public sale of the tokens or otherwise publicly launches the system or application on which the token may be used. In either case, the delivery does not occur until full functionality is achieved.
  ◦ The pre-functionality price may be stated as a fixed value, in which case the quantity of tokens to be delivered can be determined at the time the pre-functionality token sale agreement is executed. This is always the case when the trigger for token delivery is network launch.
  ◦ Alternatively, the pre-functionality price may be stated in terms of a percentage of the eventual public sale price.
- The pre-functionality token sale agreement is a separate instrument from the tokens and terminates upon the seller's delivery of tokens to the purchaser.
- The pre-functionality token sale agreement generally contains certain other standard representations, including, for instance, representations from the purchaser that it is an accredited investor purchasing the rights to the token embodied in the agreement for its own account and not with a view to distribution.

A pre-functionality token sale agreement frequently will not define the specific function of the token or the timeframe for its development and completion, or require the seller to conduct a sale before a specified time or at all. The seller's whitepaper and other information provided to the pre-functionality purchasers typically addresses such matters, often in very general terms. When analyzing a potential investment contract, the "[d]ecision will necessarily turn on the totality of the circumstances, not on any single one." *SEC* v. *Aqua-Sonic Products Corp.,* 687 F.2d 577 (2nd Cir. 1982), *cert. denied, sub nom Hecht* v. *SEC,* 459 U.S. 1086 (1982).

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[9] Present market conditions for utility tokens include the presence of robust secondary markets trading the rights to the tokens being developed primarily among resellers with speculative intent rather than users with consumptive intent. To continue the analogy to event ticket sales, the market for utility tokens is still in the early days after initial launch of ticket sales where resale is the primary intent of buyers who are attempting to gauge the ultimate price the end-user will be willing to pay for this fixed-supply good.

[10] The Kickstarter pre-functionality crowd sale model likely doesn't apply under present market conditions for utility tokens. Kickstarter campaigns do not have secondary markets trading the rights to the goods being developed, which calls into question consumptive intent.

Thus, it would be the totality of the circumstances relating to the use of the proceeds from pre-functionality token sale agreements to develop and launch a token that may give rise to an investment contract under *Howey,* rather than the pre-functionality token sale agreement itself. Nevertheless, to facilitate the discussion, this memorandum will analyze a pre-functionality token sale agreement as though it incorporated all of the reasonable understandings and expectations of the purchaser that would arise under the total circumstances.

Because of the risk that a pre-functionality token sale agreement may be deemed to constitute an investment contract, as discussed below, pre-functionality token sale agreements are frequently sold in compliance with an exemption from the registration requirements of the Securities Act. This would include provisions prohibiting any transfer of the pre-functionality token sale agreement except in compliance with such exemption, or more typically, a standard prohibition on transfer or assignment of the agreement without consent.

*E. Circumstances in Which a Pre-Functionality Token Sale Agreement May Create an Investment Contract*

A pre-functionality token sale agreement to deliver a specified amount of an asset at a specified price on a future date has many of the characteristics of a forward contract for the underlying future tokens. It is established that a forward or futures contract for non-securities, in fact any type of sales contract, normally does not entail an investment contract. For example, in *SEC* v. *Commodity Options Intern., Inc.,* 553 F.2d 628, 632 (9th Cir. 1977), the Ninth Circuit stated that:

> Commodity futures contracts are considered not to be securities *per se.* [Citation omitted] They are investments to be sure. The investment, however, is not in an enterprise but is in the underlying commodity, and we may assume, arguendo, that a conventional option to buy or sell a futures contract takes on the character of the contract that is the subject of the option and is no more a security than is that underlying contract.[11]

A pre-functionality token sale agreement differs from conventional forward contracts in an important respect: it typically involves a to-be-created novel product or service with no established market or value. In the words of the Ninth Circuit, such agreements are often "investments in the enterprise" of creating an operating token rather than an investment in just the token.

Most other products and services have a market value determined by general supply and demand where prices are bounded by the price of competing goods or services. Even if the seller in a typical forward contract engages in significant promotional efforts, such efforts should be expected to have only a marginal impact on the product's price and any resulting profits from the forward contract. Such promotional efforts would not be "undeniably significant [efforts], those essential managerial efforts which affect the failure or success of the enterprise." *SEC* v. *Glenn W. Turner Enters., Inc.,* 474 F.2d 476, 482 (9th Cir. 1973); *see e.g., Bender* v. *Continental Towers Ltd. P'ship,* 632 F. Supp. 497, 501 (S.D.N.Y. 1986) ("Here, plaintiffs allege that Continental influenced the value of the condominium units through its marketing efforts and its own buying and selling strategies. But these efforts by Continental would have at most only a marginal effect on the value of the condominium units"). Thus, expected profits from any appreciation in the value of the asset underlying a typical forward contract should not be derived from the efforts of the seller.

In contrast, the future tokens underlying a pre-functionality token sale agreement have yet to be fully developed or to demonstrate their functionality and typically are associated with an entirely novel application where the ultimate ranges of prices to be paid by end users is speculative. Any eventual profits from the pre-functionality token sale agreement may therefore depend on the successful development of the application using the tokens and on the seller's success in launching the application. In some circumstances, this may elevate the seller's efforts to the "undeniably significant" level required under *Glenn W. Turner.*

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[11] The court distinguished standard commodity futures and options from the "naked double options" that were offered by the defendant. Defendant collected and pooled the premiums for these options "and put out to speculation with the expectation that the seller's expertise in speculation will produce a profit in which the buyer and seller will share," thus creating an investment contract. Commodity Options Intern, 553 F.2d at 633. *See also,* cases cited at § 15[a] of Stephen G. Christianson, *What is "Investment Contract" within Meaning of §2(1) of Securities Act of 1933 (15 U.S.C.A. §77b(1)) and §3(a)(10) of Securities Exchange Act of 1934 (15 U.S.C.A. §78c(a)(10)), Both Defining Term "Security" as Including Investment Contract,* 134 A.L.R. Fed. 289 (1996).

Real estate provides an example of circumstances in which an asset not generally regarded as a security may become the basis of an investment contract based on promises of future development. Although the SEC has stated that "[t]he offer of real estate as such, without any collateral arrangements with the seller or others, does not involve the offer of a security," *Guidelines as to the Applicability of the Federal Securities Laws to Offers and Sales of Condominiums or Units in a Real Estate Development,* Securities Act Release No. 5382, 38 FR 9587 (1973), courts have found allegations "that defendants encouraged investment purchases by promising the lots would increase in value because of defendants' activities in developing and providing amenities, and that defendants led purchasers to believe a trust would be established to construct and operate facilities for their common benefit," sufficient to establish an investment contract. *Aldrich* v. *McCulloch Properties, Inc.,* 627 F.2d 1036, 1039 (10th Cir. 1980); *see also, Fogel* v. *Sellamerica, Ltd.,* 445 F. Supp. 1269, 1277–78 (S.D.N.Y.1978) ("the developers did represent that a variety of residential services and recreational facilities would be developed so as to increase the value of plaintiffs' property along with all of the lots in the development"); *Anderson* v. *Grand Bahama Dev. Co.,* 384 N.E.2d 981, 985 (Ill. App. Ct. 1978) ("[P]laintiffs allege that the land will become 'valuable and salable to tourists' and others *solely* [original emphasis] by virtue of defendants' efforts. They also allege that purchasers of the land could not, nor were they expected to, do anything to increase the value of their investments. These allegations fulfill the final two requirements for an investment contract as stated in *Howey*."). Similarly, an undertaking to develop and launch an application for a token may create a collateral arrangement that would cause an agreement to buy a utility token to qualify as an investment contract, even though the token itself will be a commodity.

As more fully discussed in Section I.1 below, the manner in which a token is offered is also relevant to its status as an investment contract. Offering materials that emphasize the potential profits from purchasing a token may create an expectation of profit that satisfies the third prong of the *Howey* test. Because the purchasers of the pre-functionality token sale agreement will not receive tokens until completion of the project, and many purchasers may not intend to use the tokens, there is pressure on the seller to discuss the potential market value of the tokens in its offering materials. The materials also commonly explain the anticipated timeframe for development, the development team and their relevant experience. Under these circumstances, the offering materials could be viewed as "emphasizing the economic benefits to the purchaser to be derived from the managerial efforts of" the seller which, according to the Munchee Order, could factor into finding that the pre-functionality token sale agreements are investment contracts.

The purchasers of the pre-sale functionality token sale agreement may also require assurances that the seller intends to conduct a public sale of the future tokens at a higher offering price than the pre-functionality price, reflecting the fact that the early money is being paid to take the risk that functionality may not be achieved or that the expected use may command a lower price than anticipated. Although the purchasers do not generally offer their tokens in the public sale, and may not receive unrestricted access to the tokens until the sale is completed, their ability to profit from the sale of their tokens generally depends on the success of the public sale. In the case of a token used for a new or unique software application, the public sale will establish the initial value of the token, so the seller's efforts may have more than a marginal effect on the potential profits of the purchasers who decide to sell their tokens.

Under such circumstances, which are different from those of a typical forward contract, the SEC or a court may find that the efforts of a seller are "undeniably significant" with respect to the expected profits of the purchasers. The development of a successful application for a token may be comparable to the efforts required to develop the infrastructure and amenities of a resort, which courts have found to satisfy the final element of an investment contract. Moreover, unlike an asset (such as a commodity or condominium) with an established market, the developer of a new or unique application may have significant influence over the related token's initial market value. Consequently, the seller's efforts in conducting the public token sale and launching the network application may have a significant impact on the purchaser's expected profits from selling, rather than using, the tokens. Circumstances such as these create a heightened risk that the pre-functionality token sale agreements may be classified as investment contracts.

Different circumstances may reduce the risk of a pre-functionality token sale agreement being considered an investment contract. For example, a seller may be converting an already developed application into a blockchain format using the future tokens. This might be the case for a video game which already has an "in-game" token that can be earned by playing the game and spent to acquire virtual

assets used in the game. The game developer may want to convert the in-game token to a blockchain token so as to allow players to purchase tokens rather than earn them (saving hours of game playing), and to permit other games to incorporate the tokens, so players can move their virtual wealth from game to game. In this instance, the token's "ecosystem" is largely developed; the developer only needs to pay for the programing and other costs of moving the in-game token to a blockchain. To fund this cost, the developer may offer pre-functionality token sale agreements for the blockchain tokens to current players of its game who would benefit from the ability to acquire and transfer the tokens outside of the game. The materials marketing these pre-functionality token sale agreements could emphasize the established functionality of the future tokens, the value of which would depend on the appeal of the gaming community created by the players (including the purchasers), rather than the entrepreneurial or managerial efforts of the seller. These purchasers would resemble someone buying a condominium in a nearly completed resort, which "is not under normal circumstances treated as purchasing a 'security.'" *Rodriguez* v. *Banco Cent. Corp.,* 990 F.2d 7, 10 (1st Cir. 1993); *see also,* cases cited in *Christianson, supra* note 2, 134 A.L.R. Fed. at § 12[c]. Under circumstances such as these, a pre-functionality token sale agreement may resemble a standard forward contract more closely than an investment contract.

*F. Why Tokens Delivered Pursuant to an Investment Contract May Not Qualify as Investment Contracts*

The foregoing analysis shows how a pre-functionality token sale agreement might be regarded as an investment contract due to circumstances unrelated to whether the future tokens are securities. If the circumstances have changed materially by the time of the delivery of tokens to the pre-functionality purchasers (which is often accompanied by a public sale of the utility tokens), any new offer or sale of those same tokens should not necessarily be construed to represent investment contracts. This would be the case if development of the token's functionality is completed by the time of the public sale. So long as there are no other efforts of others involved either—*i.e.,* (i) marketing materials are focused primarily on present functionality and use of the token, (ii) the seller has not built features into the token intended to provide an investment return or support the price of the token in secondary markets, and (iii) the seller does not promise to take steps to support secondary trading of the token—then, at this stage, the seller's efforts would be limited to supporting the use of the tokens with the network or software application and any further increase in the value of the token should not be derived from the efforts of the seller. Once the tokens are delivered to the purchasers, each purchaser would have unfettered control over the tokens, and would have no reasonable expectation that the seller will take future steps intended to increase the market value of the tokens. Generally, "[T]the courts will find a security is not present where the investor retains unfettered discretion over the distribution and marketing of the product." *Wabash Valley Power Ass'n., Inc.* v. *Public Service Co. of Ind., Inc.,* 678 F. Supp. 757, 767 (1988) (added emphasis). At this point, unlike the DAO Token, which promised returns from projects undertaken by the DAO, any reasonable expectation of profits the purchaser might have should depend primarily on the market's demand for the functioning application and the purchaser's own efforts to find buyers and negotiate a favorable price for the tokens (akin to general expectations of appreciation in the demand for a commodity or real estate).

Such changing circumstances—the completion of the full functionality of the token—also allow the seller to take a different approach to marketing its network or software application at the time of the public token sale. The completion of the network or software application allows the seller to focus on selling the tokens to potential users, so any marketing materials would emphasize the value in using the goods and services accessible through the token. In addition, unlike pre-functionality purchasers, the purchasers in a public sale do not expect the seller to hold a future sale of the tokens at a higher price. In fact, if the public sale is conducted to distribute the tokens at approximately their market clearing price, purchasers should not have a reasonable basis to anticipate any future appreciation in their value.

These circumstances: (i) completion of the network or software application in which the token is used, (ii) a corresponding emphasis on selling the token based on its use and the value of its application and (iii) a public sale price that approximates such value, all serve to separate the public sale of the tokens from the circumstances existing at the time the pre-functionality token sale agreements are privately placed. These changed circumstances should prevail at the time the pre-functionality purchasers receive delivery of their tokens and have an opportunity to sell them. If the tokens are not digital securities by design, and if all the other facts

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and circumstances support the conclusion that the token sale agreements entered into at the time of the public sale should no longer be viewed as investment contracts, then tokens received and, if applicable, sold by pre-functionality purchasers under those same circumstances should not be viewed as investment contracts either. The characteristics of the pre-functionality token sale agreement by which the tokens were originally purchased should not be determinative of the status of the tokens as "investment contracts" with respect to the subsequent offer and sale transaction occurring under changed facts and circumstances.

Instead, we would argue that the pre-functionality token sale agreement was the instrument that was deemed a security under the *Howey* test, but that it is distinguishable from the underlying token. The pre-functionality token sale agreement is subject to the applicable private placement restrictions for the duration of its existence and may not be offered or sold except pursuant to appropriate registration or exemption. At the point of full functionality, however, and delivery of the tokens, the tokens take on a separate regulatory existence and their status as securities should be independently determined at that time.

From *Howey* (oranges) to *Edwards* (pay phones),[12] the case law is replete with products that provide the basis for an investment contract without qualifying as securities themselves. *See, Christianson, supra* note 2, 134 A.L.R. Fed. at §§ 10[b] (citing cases involving dental care products, foxes, beavers and master tapes) and 14[a] (citing cases involving whisky, personal and home care products, oil, chinchillas and earthworms). In these cases, a critical element was the promoter's promise to either purchase or arrange for the sale of the underlying product at a profit, regardless of its current market value. A seller's undertaking to conduct a public sale of future tokens at a price above the pre-functionality price might be considered analogous to the promoters' promises in these cases. In that context, the promise of an opportunity to sell the tokens at a profit after delivery makes the pre-functionality token sale agreement an investment contract, not the character of the tokens (or any of the products in the cited cases).

Critical, and unique to tokens and this analysis, is the mutability of the token—it can be both initially representative of an investment opportunity and subsequently a functional tool for use on the blockchain application. Thus, one of the reasons it may seem appropriate to treat both pre-functionality token sale agreements and their underlying tokens as investment contracts may stem from the fact that a token directly issued and marketed under the same circumstances as a pre-functionality token sale agreement may be considered an investment contract for the same reasons as a pre-functionality token sale agreement. A pre-functionality token in this sense, has the same security-like characteristics as a pre-functionality token sale agreement. This was the case in the Munchee Order, where the utility tokens were created and delivered to purchasers prior to full functionality. The Munchee Order involved several practices (such as an undeveloped application) commonly associated with pre-functionality token offerings.

So long as utility tokens are not created or delivered to the pre-functionality purchasers prior to full functionality, the financial instrument that is the proper subject of the analysis is the pre-functionality token sale agreement itself, not the future token, which does not yet exist.

*G. Deemed Underwriter Status and "Coming to Rest" Analysis*

The adage "once a security, always a security" is alive and well, in light of the fact that the "security" is the investment contract (or, more precisely, the right to future tokens evidenced by that contract) not the asset underlying the investment contract. The pre-functionality token sale agreement never loses its character as a security and in practice these contracts are non-transferable on the part of the purchaser. Thus, the right to future tokens represented by the pre-functionality token sale agreement, which is a security, stays a security, and comes to rest in the hands of that initial purchaser. The best way to think about this is to change one fact from the *Howey* case itself—suppose the purchasers were paid in oranges instead of cash. If all the other facts remained the same, we would undoubtedly still consider the contract to be an investment contract (it would still be a contract to share profits, just denominated in oranges), but we would never conclude that the oranges, once fully grown and delivered, had somehow transformed into a security that could not be immediately sold by the purchasers upon receipt.

*H. Jurisdiction Over Hybrid Instrument*

When a contract involves an asset that is a commodity being sold under circumstances that cause the transaction to be a securities transaction under the Secu-

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[12] *SEC* v. *W.J. Howey Co.,* 328 U.S. 293 (1946); *SEC* v. *Edwards,* 540 U.S. 389 (2004).

rities Act, Section 2(f) of the Commodity Exchange Act (the "**Hybrid Instrument Exclusion**") guides the analysis of jurisdictional boundaries.[13] By acknowledging and relying on the distinctions outlined within that provision, the SEC retains its inherent discretion and latitude to address potential security law violations at the point of token issuance, in addition to, and potentially independent of, pre-functionality token sale violations. This has the systemic benefit of maintaining clarity for responsible actors within the industry, ensuring utility tokens are treated in accordance with their inherent fungible characteristic, not negatively impacting the wider pre-funding model for the rest of the industry, and maintaining consistency with existing law designed to address these dilemmas. A pre-functionality token sale would need to satisfy the enumerated requirements of the Hybrid Instrument Exclusion in order to meet the definition, although such requirements could be met through appropriate documentation and marketing restrictions, for example a legend that confirms the pre-functionality token sale agreement is subject to SEC oversight and not an instrument subject to the provisions of the Commodity Exchange Act.

Section 1(a)(29) of the Commodity Exchange Act defines a "hybrid instrument" as "a security having one or more payments indexed to the value, level, or rate of, or providing for the delivery of, one or more commodities." Section 1(a)(31) of the Commodity Exchange Act defines a "security" by reference to Section 2(a)(1) of the Securities Act of 1933 and Section 3(a)(10) of the Securities Exchange Act of 1934, both of which in turn define a security to mean, in pertinent part, an investment contract.

The guidance provided by the Hybrid Instrument Exclusion is agnostic as to what is ultimately delivered pursuant to the pre-functionality token sale agreement in question:

- in the event that the ultimate utility token delivered *does not* bear the hallmarks of a security and thus can be properly categorized as a commodity the SEC retains jurisdiction and regulatory oversight of the pre-functionality token sale agreement *qua* an investment contract, with the CFTC taking over jurisdiction and enforcement oversight of the delivered utility token in the spot market, as outlined in Section I.1 below.

- in the event that the ultimate utility token delivered *does* bear the hallmarks of a security and thus can be properly categorized as a security the SEC retains jurisdiction and regulatory oversight of the pre-functionality token sale agreement *qua* an investment contract, and also retains jurisdiction and enforcement oversight of the delivered utility token as a security *qua* a commodity. This result, although slightly counter-intuitive, arises because under the definitions applicable to the Commodity Exchange Act, a security is a type of commodity, albeit an excluded commodity which is subject to exclusive SEC oversight.

The history and interaction between the SEC and the CFTC on shared instruments is consistent with this result, and the Hybrid Instrument Exclusion is a direct result of consideration of products that escaped clear classification. The SEC

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[13] Section 2(f) Exclusion for qualifying hybrid instruments of the Commodity Exchange Act provides:

(1) In general

Nothing in this chapter (other than section 16(e)(2)(B) of this title) governs or is applicable to a hybrid instrument that is predominantly a security.

(2) Predominance

A hybrid instrument shall be considered to be predominantly a security if—

(A) the issuer of the hybrid instrument receives payment in full of the purchase price of the hybrid instrument, substantially contemporaneously with delivery of the hybrid instrument;

(B) the purchaser or holder of the hybrid instrument is not required to make any payment to the issuer in addition to the purchase price paid under subparagraph (A), whether as margin, settlement payment, or otherwise, during the life of the hybrid instrument or at maturity;

(C) the issuer of the hybrid instrument is not subject by the terms of the instrument to mark-to-market margining requirements; and

(D) the hybrid instrument is not marketed as a contract of sale of a commodity for future delivery (or option on such a contract) subject to this chapter.

(3) Mark-to-market margining requirements

For the purposes of paragraph (2)(c), mark-to-market margining requirements do not include the obligation of an issuer of a secured debt instrument to increase the amount of collateral held in pledge for the benefit of the purchaser of the secured debt instrument to secure the repayment obligations of the issuer under the secured debt instrument.

and the CFTC have considered questions relating to hybrid instruments since the 1980s (of particular note is the report of the President's Working Group on Financial Markets in 1999).[14] Since that time, the Hybrid Instrument Exclusion (formerly the hybrid instrument exemption) has been an appropriate method of determining which agency should have appropriate oversight over a legally awkward instrument.

Given the unique and novel nature of utility tokens, conceiving a pre-functionality token sale agreement as a hybrid instrument is a pragmatic and common-sense approach to a scenario that can exhibit the characteristics of both a security and a commodity for all the reasons discussed above in Section E. This position is also consistent with the legislative history and general position of both the SEC and CFTC that products should generally be regulated by a single agency. It also results in the maintenance of the inherent fungibility of the utility tokens in question—an outcome that from a commodity law perspective is sensible (the characteristics of a commodity should not be affected by its means of delivery), as well as from a securities law perspective (the utility token can be assessed on its own merits as a potentially distinct security).

On balance, treating the underlying token as a 'commodity' is an outcome consistent with the fundamental legislative intent of the Hybrid Instrument Exclusion (bearing in mind that for these purposes, a security can also be a type of commodity) and is also consistent with statements of CFTC Commissioner Brian Quintenz that [digital currencies] "may actually transform at some point from something that starts off as a security and transforms into a commodity" and that "they may start their life as a security from a capital-raising perspective but then at some point— maybe possibly quickly or even immediately—turn into a commodity".[15]

*I. Quantum of Functionality*

The real question we need to address is not about transformation, it is whether a utility token can ever achieve the status of a commodity that is not also a security. This goes to the issue of the quantum of functionality required and whether and when variables exogenous to the promoter become predominant as the reason for the purchaser's expectation of profits.

Since utility tokens do not represent a share of the promoter, the main ties back to the promoter once full functionality has been achieved would seem to be any residual belief that the promoter is likely to continue to support and update the software underlying the tokens and/or the network on which the tokens can be used. Of course, all software products have updates and upgrades, so it would be surprising indeed if tokenized software must always be treated like a security while non-tokenized software is not. Tokenized software is a novelty but the analytical framework underlying the case law requires a determination of what predominates as the underlying driver of price changes that a reasonable purchaser would expect. In a post-functionality trading market for a fully completed piece of tokenized software, the ongoing updates and upgrades from the promoter would only represent a very small driver of price changes, if any. The state of the industry, competing novel trends, competing goods and services, and fundamental supply and demand issues that drive the price of the access or service provided by the token should predominate the value attributed to a token. The recent volatility in the digital currency markets demonstrates this very clearly. It cannot be said that someone's promises of updates to the Bitcoin protocol, for example, had anything to do with the recent price swings. The real price swings occurred **after** the fork to the protocol was completed. These market moves were unrelated to any promises by a promoter to update the software as a driver of price, but instead reflected exogenous views of the market as to the value of Bitcoin.

1. Whose Perspective Counts?

In *Teague* v. *Bakker,* the Fourth Circuit affirmed that "[t]he subjective intention of a given purchaser cannot control whether something is a 'security'" for purposes of the *Howey* test, otherwise "some might have purchased securities while others did not." 139 F.3d 892, 892 (4th Cir. 1998). Rather, "[t]he proper focuses of the inquiry are on the transaction itself and the manner in which it is offered." which would tend to place emphasis on objective evidence and considerations such as marketing materials, communications and transaction documents. *Id.*

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[14] Report of the President's Working Group on Financial Markets, *Over-the-Counter Derivatives Markets and the Commodity Exchange Act,* November 9, 1999. Available at: *https://www.treasury.gov/resource-center/fin-mkts/Documents/otcact.pdf.*

[15] COINCENTER.ORG, *CFTC commissioner: tokens that start as securities may "transform" into commodities.* October 20, 2017. Available at: *https://coincenter.org/link/cftc-commissioner-to-kens-that-start-as-securities-may-transform-into-commodities.*

The manner of offering was paramount in the recent Administrative Order against Munchee, Inc., Sec. Act Release No. 10445 (Dec. 11, 2017) (the "**Munchee Order**"), which found an investment contract based on the promoter "emphasiz[ing] the economic benefits to the purchaser [of a token] to be derived from the managerial efforts of the [token's] promoter." The tokens in the Munchee Order ("**MUN**") were intended for use in an application to advertise, review and buy meals from restaurants, although "no one was able to buy any good or service with MUN" at the time of their sale. Munchee Order at 10. "In the MUN White Paper, on the Munchee Website and elsewhere, Munchee and its agents . . . emphasized that the company would run its business in ways that would cause MUN tokens to rise in value." *Id.* at 12. The SEC also found that "Munchee primed purchasers' reasonable expectations of profit through statements on blogs, podcasts, and Facebook that talked about profits." *Id.* at 14. Munchee also undertook to list MUN on exchanges, so that purchasers could realize profits through secondary trading, regardless of whether they ever used MUN in the application. *Id.* at 13. These findings led the SEC to conclude that MUN tokens were investment contracts, *id.* at 30, insofar as, "*[b]ecause of the conduct and marketing materials of Munchee and its agents,* investors would have had a reasonable belief that Munchee and its agents could be relied on to provide the significant entrepreneurial and managerial efforts required to make MUN tokens a success." *Id.* at 34 (added emphasis).

Notwithstanding its emphasis on the manner of offering, *Teague* allowed that in some cases, "where most intended purchasers share a common understanding of, and have similar motives stoked by, an offering, the 'subjective' understanding and motives are powerful evidence of the objective intent and effect of the offering." *Teague,* 139 F.3d at 892. *Teague* set a high bar for reaching this conclusion: it looked to "the subjective feeling of the vast majority of purchasers," and not merely the particular plaintiffs in question, as likely indicative of the seller's objective intention despite other evidence. *Id.* It should also be noted that the motives must still be "stoked by the offering," rather than a general enthusiasm for all things associated with a blockchain. It follows that a token seller that implements safeguards and constructs a token and conducts a token sale the "right way" will ultimately be able to sell a utility token as a non-security even if some purchasers have wildly unrealistic expectations of profit akin to beanie baby mania.

2. Who are the "Others" in Efforts of Others?

The original formulation of the *Howey* test stated that the profits must have been expected "solely from the efforts of the promoter or **a third party**." This test has been subsequently modified with respect to the requisite amount of efforts as discussed below. Some courts [16] have focused on the efforts of **the promoter** as satisfying the common enterprise prong of the *Howey* test as discussed below, with other courts noting that this treatment would conflate the common enterprise prong with the efforts of others prong. Putting aside the common enterprise conflation and focusing again on the efforts of others prong, most cases focus on either the promoter's efforts or the purchaser's efforts. It would appear from the original formulation that reliance must be placed on the efforts of some identifiable person or persons. The clause would be overbroad if "others" were interpreted to include anyone other than the purchaser. All investment assets would be securities if efforts of others included the efforts of unspecified persons contributing to market dynamics and supply and demand. This element of the test will be relevant to many utility token sales since, unlike traditional enterprises, typically, the projects involve the development of open-source software that can be maintained by anyone and not just the original promoter of the project. Even for those who subscribe to the broad vertical commonality interpretation of the common enterprise prong of the *Howey* test, however, that interpretation has focused on the efforts of the promoter, so the entire community of open source software developers would need to be considered part of the promoter in order to satisfy that interpretation. While the original promoter is the most likely party to provide updates and upgrades to the code, the fact that there is a large community of developers who could easily decide to step in and do so further minimizes the amount of reliance a reasonable purchaser would objectively have on the efforts of the promoter as compared to the far weightier price drivers in a trading market that have nothing to do with the original token seller.

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[16] *Revak* v. *SEC Realty Corp.,* 18 F.3d 81, 87–88 (2d Cir. 1994), relying on *Long* v. *Shultz Cattle Co. Inc.,* 881 F.2d 129, 140–41 (5th Cir. 1989); *SEC* v. *Comcoa, Ltd.,* 855 F. Supp. 1258 (S.D. Fla. 1994) (finding vertical commonality with regard to service to assist application and development of FCC licenses). These courts can be said to subscribe to the broad vertical commonality interpretation of the common enterprise prong of the *Howey* test.

3. Requisite Amount of Efforts of Others

As discussed, the original *Howey* formulation was modified by subsequent case law that recognized the word "solely" was too narrow. It is clear that at one end of the spectrum, if either the purchaser's efforts are significant in the success of the enterprise,[17] or the promoter's efforts are *de minimis* in assuring the success of the investment, the *Howey* test is not satisfied. Beyond that, courts have stated the requirement as "primarily" or "substantially" from the efforts of others.[18] As discussed above, in *Glenn W. Turner,* the court stated the test as "whether the efforts made by those other than the investor are the undeniably significant ones, those essential managerial efforts which affect the failure or success of the enterprise." The context for this test was a business enterprise that included both efforts of the promoter and efforts of the purchaser. The court was clearly focused on ensuring that promoters could not avoid the securities laws by merely building in some perfunctory efforts of the purchaser into their business schemes. When the context is about determining when the promoter's efforts are displaced by variables entirely exogenous to (and beyond the control of) both the promoter and purchaser, the test is better understood to be a simple predominance test. For that reason, we have used predominance as the test throughout this memorandum, but we would also expect that if a court applied a test more like the *Glenn W. Turner* test, the efforts associated with software updates and upgrades would still not rise to the level described by that test. It can hardly be said that providing ongoing software updates and upgrades constitute those essential managerial efforts which affect the failure or success of the secondary market price,[19] particularly compared to the other market dynamics affecting price in the trading market post-functionality.

Since the test is objective, and because use of tokens for their intended purpose is gaining traction, some courts might well conclude that purchasers are not merely passive and that the purchaser's collective efforts are significant because use of the token for its intended purpose is a strong driver of demand for the token and, therefore, the price of the token. Many applications permit, and some require, token holders to participate in the operation of the application. A crowdsourcing application will not work unless enough users vote or otherwise record a view on the crowdsourced question. These applications frequently use tokens to regulate the crowdsourcing process, assign and weight votes and reward the most accurate predictions. Networked services are another common example of applications that require active participation by token holders. Network participants must download the service application on their computers and accept tokens in exchange for performing the service. Holders of tokens for such applications may be active contributors to the token's success, rather than passive investors. Many courts have found that an arrangement does not constitute an investment contract when it involves significant efforts of the purchaser. *See Cordas* v. *Specialty Restaurants, Inc.,* 470 F. Supp. 780, 788 (D. Ore. 1979) ("[i]t is undeniable here that the plaintiff's managerial efforts were intended to have an important effect on her own success. Her efforts would also have some effect, however slight, [added emphasis] on the success of the enterprise as a whole. [Citation omitted.] These factors are sufficient to preclude her from coverage under the *Howey* analysis." "To hold otherwise would put the courts in the position of judging where along the continuum a manager's efforts become 'significant' in the success of a larger enterprise.") *Id.* at 788. The Cordas court chose to apply *Howey* based on the quality of the plaintiff's participation, rather than its impact on the broader enterprise. Other courts have also taken this approach to the final prong of the *Howey* test, particularly in cases involving franchises. For example, *Boldy* v. M*cConnell's Fine Ice Creams, Inc.,* 904 F.2d 710 (9th Cri. 1990) ("In focusing on 'the extent of participation the franchisee has under the franchise agreement' in this case, it is clear that 'each franchisee's active management was essential to the success of his retail restaurant.'" [Citation omitted.]); *see also,* cases discussed in What is an "Investment Contract" within Meaning of § 2(1) of Securities Act of 1933 (15 U.S.C.A. § 77b(1)) and § 3(a)(10) of Securities Exchange Act of 1934 (15 U.S.C.A. § 78c(a)(10)), Both Defining Term "Security" as Including Investment Contract, 134 A.L.R. Fed. 289, § 17[a]–[c] (Cum Supp. 2017).

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[17] *E.g., Steinhardt Group* v. *Citicorp,* 126 F.3d 144 (3dCir. 1997) (limited partnership interest in a securitization transaction was not a security where limited partner's retention of "pervasive control" meant that he was relying extensively on his own efforts).

[18] *See, e.g., United States* v. *Leonard,* 529 F.3d 83 (2d Cir. 2008) (the court considered whether, under all the circumstances, the scheme was being promoted **primarily** as an investment).

[19] This illustrates the problem with applying *Glenn W. Turner* to tokens. There is no enterprise on whose success or failure the token holder's investment depends. The closest analog might be to substitute the secondary market for the "enterprise" in that test.

Whether or not a court finds substantial efforts of token holders are involved, it seems likely that once full functionality has been achieved, the efforts of the promoter would not rise to the level required by the efforts of others element of the *Howey* test to consider post-functionality sales of the token to constitute investment contracts.

### 4. *Gary Plastic*

The *Gary Plastic* case has special relevance to utility tokens given the robust secondary markets that have developed. In an ordinary case, most of the elements of *Gary Plastic* can be distinguished—token exchanges do not negotiate the terms of the tokens, do not promise to find buyers for the tokens and are not exclusive venues for purchase and sale of the tokens. The key element, however, that would be applicable is any promise by the promoter to establish or maintain a trading market for the tokens. This can be described as a special type of "efforts of others" that obviates the need for analysis of trading dynamics as the driver of price since the expectation that the market will exist in the first place is based on the promised efforts of the promoter. It follows that any promises by the promoter to support an active trading market for the token would, by itself, be sufficient to satisfy the efforts of others prong of the *Howey* test. The same would not be true, however, if the token seller were to cooperate with token exchanges in the qualification process without publicizing in advance any promise of such cooperation. Without a promise of supporting trading in advance of a purchase, the purchaser cannot reasonably expect it, as token exchange qualification requirements are significant and evolving rapidly. While outside the scope of this paper, we note that some exchanges are currently requiring token sellers to provide a securities law analysis and some token creators are declining to provide this for fear of being seen as facilitating exchange activity. As a result, many tokens perversely wind up being traded only on the less rigorous (often foreign) exchanges that do not require interaction. Discouraging cooperation with the qualification process, may negatively impact the ability of exchanges to properly discriminate between tokens that are securities, which the exchange is not licensed to list, and utility tokens. Similarly, merely providing links to token exchanges contained on a token seller's website should not be viewed as efforts of the promoter to support an active trading market, so long as these links are merely included to assist users of the platform in obtaining tokens for use on the platform.

### 5. Full Functionality

In light of the above, it is clear that merely some utility is not sufficient under present market conditions. A reasonable approach to defining how much functionality is sufficient under present market conditions would be to say that the token must have at least as much functionality as any other non-tokenized good or service being sold. To that end, we would propose an 80/20 rule of thumb whereby the marketing materials focus on the present functionality of the token with much less attention paid to the potential future upgrades or additional features (*i.e.,* 80% focused on present functionality and 20% on future functionality). This roughly approximates what other sellers of non-tokenized goods and services have historically put into their marketing materials. While virtually all products with embedded software come with free updates, the seller will focus on the present functionality of the product to entice the purchaser with the features the purchase can presently enjoy. The seller might also mention planned future enhancements that will be delivered for free to induce the purchaser to buy now rather than wait because the purchaser will get the update for free when available without having to wait to enjoy all the present features of the product. Stereo equipment is a good example of this where the marketing materials will focus on the present features, but will also include some mention of the "future proof" nature of the purchase by discussing other codecs (*i.e.,* digital music formats) that will be supported on the equipment after a firmware update that will be provided for free when available.

Once a token has achieved its full functionality under this proposed standard, any purchaser that purchases the token with an expectation of profits is relying primarily on market dynamics affecting the value of the goods and services accessible through the token (not the promoter) for price changes. So long as the token seller did not promise to support secondary trading on any exchanges, the sale of a utility token with full functionality should not be the sale of a security.

### *J. Consumptive Intent **vs.** Resale*

As discussed, the *Teague* court focused on objective criteria in determining the purchasers' intent. Other Federal courts have expanded on *Teague,* concluding that marketing materials indicating an actual subjective investment-related purpose established by the plaintiff could not override a contractual representation and merger

clause affirming that a purchase was for consumption.[20] As such, even under current market conditions where resale intent appears to be more prevalent than consumptive intent, there are certain practices that could be employed by token sellers to establish sufficient consumptive intent, although these are not common features of a token sale. Here are a few examples:

- Establish limits on the number of tokens any individual purchaser may purchase to approximate the number likely to be used in a reasonable amount of time;
- Exclude purchasers who fit the profile of an investor (*e.g.,* venture funds or hedge funds);
- Include lockups on the tokens that preclude resale but permit use for some period of time;
- Include representations as to intended use of the token; and
- Include covenants of the purchaser to login and use the tokens in the network on some prescribed periodic basis.

Since an offering must meet each prong of the *Howey* test to be considered an investment contract, if sufficient consumptive intent were to be established, the token sale would not be an investment contract even if the sale occurred prior to the development of full functionality.

It is also important to consider when the appropriate time to measure consumptive intent *vs.* resale intent is. In the case of event tickets, resale intent predominates the first few days following ticket launch as resellers attempt to speculate on the ultimate price that users will be willing to pay. This is because the tickets are generally not released until shortly before the event takes place. Because there is a fixed date for use, the seller is able to ensure that the time for resale is arbitrarily short. With utility tokens, there is no fixed date for use so it is possible that resale will go on for a relatively long time and only gradually shift to use as the project gains adoption and traction among users. As that happens, the price would be expected to converge on the ultimate price that end users are willing to pay.[21] If we measure consumptive intent today for a utility token launched last week, it is likely we will conclude that resale intent predominates over consumptive intent presently. That doesn't mean there never will be consumptive intent or that the utility tokens have no inherent consumptive purpose. The same would be true of event tickets if measured at a time when resale was prevalent. Anecdotal evidence suggests that there have been a number of earlier token offerings from the 2014 and 2015 vintage with respect to tokens that are now routinely used for their intended purpose. This is why the Kickstarter model was considered best practices for the early utility token sales in 2017. This inevitable change in circumstances, *i.e.,* mutability, at least for those tokens with truly useful functionality, is also why it makes sense under existing case law to only consider pre-functionality token sale agreements to be securities, and not the tokens themselves in perpetuity.

*K. Characteristics of a "Compliant" Token Sale*

As the DAO Report found, and as many commentators and regulators have observed, many token sales are currently running afoul of U.S. securities laws. In this sense, the DAO Report sounded an important cautionary alarm to the market. However, the offer and sale of tokens can be affected in a manner that complies with the requirements of the Federal and state securities laws. Here are the key characteristics that must be present in a token sale that complies with the requirements of the U.S. securities laws:

- The token cannot offer or be packaged with a financial return or share of ownership;
- Prior to achieving full functionality, the offer and sale of tokens will almost always be deemed to be the offer and sale of an investment contract that must be registered or exempt under U.S. securities laws;

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[20] *Demarco* v. *LaPay,* No. 2:09–CV–190 TS, 2009 WL 3855704, *8–*9 (D. Utah Nov. 17, 2009) (holding that plaintiffs could not "disclaim the contents of the contract which were clearly laid out and duly acknowledged by them" in real estate transaction); *see also Alunni* v. *Dev. Res. Group, LLC,* No. 6:08–cv–1349–Orl–31DAB, 2009 WL 2579319, *8 n. 12 (M.D. Fla. Aug. 18, 2009) (same).

[21] In many cases, the use price of a utility token is entirely independent of the secondary market price, in which case the secondary market speculation is really about currency value which is commodity speculation having nothing to do with the project or promoter. These types of utility tokens are much more akin to digital currencies in their relationship to securities laws.

- Once full functionality is achieved, there should be no expectation of profit from the efforts of others, and value should instead be driven by exogenous market factors. At such a point, the token should no longer be deemed an investment contract, as the transaction no longer meets the *Howey* test, and the offer and sale of tokens should no longer be subject to the requirements of the Securities Act;

- The requisite amount of functionality needed is fact-based, with marketing being an important determinant—if buyers would not buy the token for its present functionality, the token seller must build more present functionality before distributing the token to the public as a non-security;

- Marketing materials must focus on present functionality and use of the token, not on future features or resale opportunities, although a short description of any planned upgrades is permissible; and

- The token seller cannot promise to support secondary market trading of the token on any exchanges.

We believe the following facts tend to push the securities analysis one way or the other but are not by themselves dispositive (good facts push the analysis toward a non-security):

- Fixed or automatically increasing supply of tokens is generally a good fact. A fixed or automatically increasing supply is not characteristic of most traditional product sales, but it is also not characteristic of most securities offerings either.[22] It is a currency-like characteristic and generally stems from the Bitcoin model and the fact that most utility tokens are used as currencies even if they have additional functions and features. A fixed or automatically increasing supply also helps the analysis around efforts of others in the sense that the promoter has no control over supply, which is a key element of price in the trading market.

- Diminishing token supply, either automatic or periodic, tends to indicate an intent on the part of the token seller to drive up the price of the token in the secondary markets. If this feature exists, there should be important structural reasons for this feature having nothing to do with the desire to influence price. This feature represents efforts of the promoter in structuring the token that not all courts would recognize as satisfying the *Howey* test to the extent the court applies the *Life Partners* test focusing on post-sale efforts rather than pre-sale efforts, but since this conclusion is in question, it is still considered to be a bad fact for purposes of utility token sales.

- Publicly announced discounts that diminish over a set schedule are problematic during a post-functionality token sale, especially if not accompanied by resale lockups. While this may be a practice used by conventional sellers of goods and services, in the context of utility tokens, it does tend to create an expectation of profits based on the efforts of the promoter to structure the token sale in this manner. Once again, these would be pre-sale efforts of the promoter, but it would still be considered a bad fact for a utility token sale. Also, the same practice would be appropriate during the pre-functionality token sale, because the purchasers are investors with a profit motive participating in a securities offering with the requisite protections in place.

- Allocations of a substantial number of tokens to the token seller team as well as to advisors, strategic partners and others for compensatory purposes, especially without any significant resale lockups in place, clearly puts tokens in the hands of persons with resale intent, not consumptive intent. This may not matter to the extent we have already assumed that most purchasers are purchasing with resale intent. At a minimum, if these allocations are granted pre-functionality, the grant must comply with Rule 701 or Regulation D or otherwise comply with U.S. securities laws. The real reason this could be a bad fact is that this practice may result in fraudulent "pump and dump" Ponzi-like schemes on the part of the persons receiving the allocations.

- Each of the factors discussed above in Section J that tend to establish consumptive intent rather than resale intent are good facts, particularly lockups that prohibit resale but not use for a significant period of time after purchase, which are an excellent way to curb "pump and dump" tendencies and to emphasize intent to use rather than resell.

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[22] Once again, event tickets are an example of a traditional good that does have a fixed supply.

*L. Existing Regulations Applicable to Token Exchanges—CFTC Anti-Fraud Rules*

The CFTC is responsible for enforcement actions against wrongful conduct in spot markets for digital currencies.[23] Historically, the CFTC has exercised that enforcement authority when there is a nexus to an actively traded commodity interest,[24] and, consistent with that approach, since the recent launch of digital currency-related derivative products, the CFTC has stepped up its enforcement actions against spot market abuses, although its initial digital currency-related actions began in 2015.[25] "Bitcoin and other virtual currencies" have already been deemed within the scope of 'commodities' under CFTC enforcement jurisdiction, and given the wide scope of the definition (the term commodity means "all other goods and articles [. . .] and all services, rights and interests [. . .] in which contracts for future delivery are presently or in the future dealt in"), any utility token with fungible characteristics falls within this scope.[26]

In September 2017, in its complaint against *Gelfman,* the CFTC took action against alleged abuses in the Bitcoin spot market and charged operators of an alleged Ponzi scheme with fraud, misappropriation and issuing false account statements in violation of Section 6(c) of the CEA.[27] In January 2018, the CFTC brought three digital currency enforcement actions: (i) *My Big Coin Pay Inc.,* which charged the defendants with commodity fraud and misappropriation related to the ongoing solicitation of customers for a digital currency known as My Big Coin;[28] (ii) *The Entrepreneurs Headquarters Limited,* which charged the defendants with a fraudulent scheme to solicit Bitcoin from members of the public, misrepresenting that customers' funds would be pooled and invested in products including binary options, making Ponzi-style payments to commodity pool participants from other participants' funds, misappropriating pool participants' funds, and failing to register as a Commodity Pool Operator;[29] and (iii) *CabbageTech, Corp.,* which charged the de-

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[23] The term digital currency means the same thing as virtual currency for purposes of this memorandum. In its enforcement order against Derivabit in September 2015, the CFTC confirmed that "Bitcoin and other virtual currencies are encompassed in the definition and properly defined as commodities." *United States of America Before the Commodity Futures Trading Commission In the Matter of Coinflip Inc., d/b/a Derivabit, and Francisco Riordan, Respondents.* Order Instituting Proceedings Pursuant to Sections 6(c) and 6(d) of the Commodity Exchange Act, Making Findings and Imposing Remedial Sanctions. CFTC Docket No. 15–29, September 17, 2015. Available at: *http://www.cftc.gov/idc/groups/public/@lrenforcementactions/documents/legalpleading/enfcoinfliprorder09172015.pdf.*

[24] CEA Sections 6c, 9a(2) and Part 180 of the CFTC's regulations give the CFTC the authority, in relevant part, over violations with respect to "any commodity in interstate commerce." 7 U.S. Code §§ 9, 13, and 17 CFR § 180, 76 FR 41398. There are two particular provisions of the CEA that grant the CFTC broad authority to take action against persons engaged in forms of market abuse, including manipulation and fraud, or attempted manipulation and fraud, Sections 6(c) and 9(a)2. Commission Regulation 180 (*i.e.,* Part 180) codifies Section 6(c).

[25] In addition to the *Derivabit* action outlined above, the CFTC has also taken action against *TeraExchange* in 2015, and the spot exchange *Bitfinex* in 2016, for CEA violations associated with virtual currencies. S*ee United States of America Before the Commodity Futures Trading Commission In the Matter of TeraExchange LLC Respondent.* Order Instituting Proceedings Pursuant to Sections 6(c) and 6(d) of the Commodity Exchange Act, as amended, Making Findings and Imposing Remedial Sanctions. CFTC Docket No. 15–33, September 24, 2015. Available at: *http://www.cftc.gov/idc/groups/public/@lrenforcementactions/documents/legalpleading/enfteraexchangeorder92415.pdf. See also United States of America Before the Commodity Futures Trading Commission In the Matter of BFXNA Inc. d/b/a BITFINEX, Respondent.* Order Instituting Proceedings Pursuant to Sections 6(c) and 6(d) of the Commodity Exchange Act, as amended, Making Findings and Imposing Remedial Sanctions. CFTC Docket No. 16–19, June 2, 2016. Available at: *http://www.cftc.gov/idc/groups/public/@lrenforcementactions/documents/legalpleading/enfbfxnaorder060216.pdf.*

[26] CEA Section 1a(9), 7 U.S. Code § 1.

[27] *Commodity Futures Trading Commission* v. *Gelfman Blueprint, Inc. and Nicholas Gelfman,* Case Number 17–7181, United States District Court, Southern District of New York. Complaint filed September 21, 2017. Available at: *http://www.cftc.gov/idc/groups/public/@lrenforcementactions/documents/legalpleading/enfgelfmancomplaint09212017.pdf.*

[28] *Commodity Futures Trading Commission* v. *My Big Coin Pay, Inc., Randall Crater, and Mark Gillespie,* Case Number 18–10077–RWZ, United States District Court, District of Massachusetts. Complaint filed January 16, 2018. Available at: *http://www.cftc.gov/idc/groups/public/@lrenforcementactions/documents/legalpleading/enfmybigcoinpaycomplt011618.pdf.*

[29] *Commodity Futures Trading Commission* v. *Dillon Michael Dean and the Entrep[r]eneurs Headquarters Limited,* Case Number 18–cv–00345, United States District Court, Eastern District of New York. Complaint filed January 18, 2018. Available at: *http://www.cftc.gov/idc/groups/public/@lrenforcementactions/documents/legalpleading/enfentrepreneurscomplt011818.pdf.*

fendants with fraud and misappropriation in connection with purchases and trading of Bitcoin and Litecoin.[30]

The CFTC also appears to be closely monitoring digital currency spot exchanges as part of these efforts. As part of the self-certification process for Bitcoin futures products by certain Designated Contract Markets ("**DCMs**"), the CFTC expects information sharing agreements to be in place with underlying spot exchanges in accordance with the second core principle for DCMs.[31] On February 15, 2018, the CFTC once again reminded market participants in a customer protection action that it "maintains general anti-fraud and manipulation enforcement authority over virtual currency cash markets as a commodity in interstate commerce."[32] It has also apparently (i) requested information from GDAX in relation to an alleged 'flash crash' which occurred on June 21, 2017,[33] and (ii) issued subpoenas regarding alleged conduct at the Hong Kong-based exchange Bitfinex.[34]

Reinforcing the inherent scope of the CFTC's enforcement authority is the possibility of aiding and abetting violations that act to restrain certain industry service providers or other market participants associated with any alleged violations.[35] The efficacy of this regulation by proscription is further reinforced by the ability of private litigants to take actions under the above provisions, subject to certain additional requirements.[36] For a private actor to make a claim, they must demonstrate, *inter alia,* that they purchased or sold a derivative contract referencing a digital currency and prove actual damages resulting from the proscribed conduct. Although this right of action therefore relies on a nexus to the digital currency derivative market, as the number and diversity of digital currency based derivative products continues to grow so too does the number of potential plaintiffs.

*M. Conclusion*

The *Howey* test is fundamentally based on facts and circumstances—the economic realities—of the offer and sale of the underlying product or service.[37] As circumstances change, the results of the test should change as well. Specifically, when the circumstances under which parties agree to enter into a pre-functionality token sale agreement have changed by the time the underlying tokens are delivered, an analysis which concluded that the pre-functionality token sale agreement constituted an investment contract may no longer apply to the tokens. On the other hand, if circumstances have not changed materially, new token sale agreements may constitute investment contracts in their own right, even after delivery under the initial pre-functionality token sale agreement.

A pre-functionality token sale agreement may be found to constitute an investment contract even if the future tokens will not qualify as investment contracts or other securities at the time of their delivery. When a seller offers and sells the pre-functionality token sale agreements by emphasizing the potential value of the future

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[30] *Commodity Futures Trading Commission* v. *Patrick K. McDonnell, and CabbageTech Corp. d/b/a Coin Drop Markets,* Case Number 18–cv–0361, United States District Court, Eastern District of New York. Complaint filed January 18, 2018. Available at: *http://www.cftc.gov/idc/groups/public/@lrenforcementactions/documents/legalpleading/enfcdmcomplaint011818.pdf*.

[31] *See* CFTC *Backgrounder on Self-Certified Contracts for Bitcoin Products,* December 1, 2017. Available at: *http://www.cftc.gov/idc/groups/public/@newsroom/documents/file/bitcoin_fact_sheet120117.pdf*. *See also* CFTC *Statement on Self-Certification of Bitcoin Products by CME, CFE and Cantor Exchange,* December 1, 2017. Available at: *http://www.cftc.gov/PressRoom/PressReleases/pr7654-17*.

[32] *CFTC Customer Advisory: Beware Virtual Currency Pump-and-Dump Schemes,* February 15, 2018. Available at: *http://www.cftc.gov/idc/groups/public/@customerprotection/documents/file/customeradvisory_pumpdump0218.pdf*.

[33] Lily Katz and Matt Robinson, *Cryptocurrency Flash Crash Draws Scrutiny from Watchdog,* BLOOMBERG.COM, October 2, 2017. Available at: *https://www.bloomberg.com/news/articles/2017-10-02/cryptocurrency-flash-crash-is-said-to-draw-scrutiny-from-cftc*.

[34] Matthew Leising, *U.S. Regulators Subpoena Crypto Exchange Bitfinex, Tether,* BLOOMBERG.COM, January 30, 2018. Available at: *https://www.bloomberg.com/news/articles/2018-01-30/crypto-exchange-bitfinex-tether-said-to-get-subpoenaed-by-cftc*.

[35] To prove an aiding and abetting violation under the CEA (7 U.S. Code § 25(a)(1)), it must be shown that the defendant "in some sort associate himself with the venture, that he participate in it as in something that he wishes to bring about, that he seek by his action to make it succeed." *CFTC* v. *Amaranth Advisors, L.L.C.,* 554 F. Supp. 2d 523 (2008) stating the appropriate standard for aiding and abetting under the CEA, quoting Learned Hand J. in *United States* v. *Peoni,* 100 F.2d 401, 402 (2d Cir.1938).

[36] 7 U.S. Code § 25(a)1(D) provides that a private litigant can take action for fraud, attempted fraud or if the violation constitutes "a manipulation of the price of any such contract or swap or the price of the commodity underlying such contract or swap."

[37] *Howey, supra* note 2 at 299. (The *Howey* test "embodies a flexible rather than a static principle, one that is capable of adaptation to meet the countless and variable schemes devised by those who seek the use of the money of others on the promise of profits.")

tokens, uses the proceeds of the pre-functionality token sale agreements to complete development of an application for the tokens and undertakes to conduct a public sale of the tokens with a target price above the pre-functionality price, these circumstances may provide a basis for the SEC or a court to conclude that the pre-functionality token sale agreements are investment contracts. Once the network or software application for the tokens is developed, these circumstances would no longer apply and, thus, could no longer provide a basis for concluding that further sales of tokens would constitute investment contracts. Even if the pre-functionality purchasers reasonably anticipate that a token will appreciate above its public sale price, any such appreciation should result from general market forces rather than the efforts of the seller. Therefore, once the investment contract implied by the pre-functionality token sale agreement has been completed (*i.e.,* at the time of tokens are delivered), the tokens should no longer involve a common enterprise in which the seller's efforts are reasonably expected to produce profits for the token purchasers.

*N. Epilogue*

While not directly related to the above conclusion, here are some additional thoughts worth considering.

1. Relevant Disclosure

Ultimately, the Securities Act is a disclosure regime. One important way to look at this situation is to ask what the relevant disclosure would be post-functionality. Existing disclosure rules assume the security represents either equity or debt, neither of which would be appropriate disclosure rules for utility tokens. It would not be wise, for example, to include disclosure about the token seller, or we would confuse the purchasers into believing they have some interest in the token seller, which they do not. Perhaps some disclosure would be appropriate about the real risk here, namely that the market price is extremely volatile, but that is now patently obvious to anyone sitting in front of a computer and is not something about which the token seller has any special information or expertise to provide. Maybe some disclosure about overhang would make sense, especially if the token seller happens to be aware of any large purchasers, but this disclosure again risks providing false comfort to the market since the token seller, unlike an equity issuer, has no way of knowing who holds any particular percentage of the tokens from time to time. We have to ask ourselves, if there is no relevant disclosure that could possibly be provided by the token seller post-functionality, are we really dealing with a securities transaction that is appropriately regulated under a disclosure regime, or are the regulatory concerns really about trading price manipulation covered by the CFTC's anti-fraud rules for spot trading?

2. Common Enterprise

We have not considered the common enterprise prong of the *Howey* test in the above discussion because the courts are fractured over the best way to interpret this prong of the test. This fact, however, cuts both ways. It is not prudent for a token seller to rely on this test as the sole prong to hang its hat on, or for regulators to assume it will be easy to prove (and the regulator must prove it to win in court).

Indeed, the most commonly applied interpretation of this prong involves horizontal commonality, which doesn't appear to be the case once tokens have achieved full functionality and are sold to purchasers as a product. There are no contractual commitments on the part of the token seller surviving the post-functionality token sale. The proceeds of a post-functionality token sale cannot be said to be pooled in any enterprise of which the token holders own a share or interest. It is true that narrow vertical commonality will often exist in the sense that the token seller's fortunes are often tied to the same market dynamics as the token holders to the extent the price of tokens rises and the token seller has retained an inventory of tokens for future sale. Perhaps for the very reason that this type of commonality would apply to every seller of a good or service that is hoping for the prices of its goods to go up, very few courts have held that narrow vertical commonality is sufficient by itself to satisfy the common enterprise prong. Broad vertical commonality, meaning that the fortunes of the token holder are tied to the efforts of the token seller would be subsumed within the efforts of others prong, so it would not be sufficient for merely **some** efforts of the promoter to satisfy the *Howey* test for all the reasons described above with respect to the efforts of others prong showing that those efforts must predominate the expectation of profits. From the regulator's perspective, at best, the common enterprise prong adds nothing to the analysis, but in all likelihood, it represents a very significant hurdle to overcome in court.

### 3. Fraudulent Sales Tactics—Pump and Dump

We have pointed out in several instances above that, if we apply existing case law with analytical consistency, the mere marketing of a post-functionality token (or any commodity, such as gold coins) as an investment should not, by itself, cause the offering to satisfy the *Howey* test. Nevertheless, we leave open the possibility that the presence of abusive marketing tactics or running a so-called "pump and dump" scheme can satisfy the efforts of others prong in that purchasers would expect to profit on the continuation of those abusive promotional efforts. In any market environment, that would be sufficient basis for satisfying *Howey* if the other prongs were also satisfied. Moreover, token sellers would be unwise to ever refer to the token as an investment, whether pre- or post-functionality, because those statements will live on and be discoverable with an Internet search even at some future time when the token seller would like to be able to conclude that the efforts of others prong is no longer the only prong available to avoid satisfying the *Howey* test (*e.g.,* if the token seller wants to market future features after the market has cooled down and the tokens are being used instead of resold for the most part). As such, we do not expect this technical point—that commodities may be marketed as investments—to lead to problematic behavior in the context of token sales.

### 4. *Reves* Test

It is important not to confuse the *Reves* test with the *Howey* test. Some of the *Reves* factors are similar to some of the *Howey* prongs. The first *Reves* factor examines the transaction in order to assess the motivations that would prompt a reasonable lender (buyer) and creditor (seller) to enter into it. For example, was the transaction in question an investment transaction or a commercial or consumer transaction? This factor might be confused with the expectation of profits element of the *Howey* test. In *Reves* the satisfaction of any one factor, if strong enough, can cause the note to qualify as a security. This confusion may lead to the incorrect application of *Howey* which requires **every** prong to be satisfied, regardless of how clearly any one factor may be satisfied, for the arrangement to qualify as an investment contract. Again, it is not sufficient for an expectation of profits to exist with respect to an asset that may even be marketed as an investment, if the expectation is not based on the efforts of others. Analytically, it just doesn't matter in how many ways and how clearly the expectation of profits prong is satisfied if those expectations are not based on the efforts of others.

In addition, some of the *Reves* factors would appear relevant to utility tokens, especially the second factor, which is the plan of distribution used in the offering and selling the instrument—for example, is the instrument commonly traded for investment or speculation? While it may be tempting to consider the trading markets for utility tokens to be dispositive of the issue of whether a utility token is a security, that is not the case. As discussed above, it is merely one more fact tending to establish the expectation of profits element of the *Howey* test, which may be overridden by the other prongs.

### 5. Policy Considerations

Blockchain technology is as transformative as the Internet. While the Internet was about the movement of information (and set off lots of new legal concerns around privacy and data security), blockchain technology is about the movement of value. The key innovation, as with the Internet, is found in the frictionless nature of the movement. It has already led to important new business models never seen before. It will ultimately lead to rapid frictionless liquidity for every asset class and every good and service. Wherever possible, it will be important to regulate based on looking through the token to the thing being tokenized for the right regulatory treatment. But, it will mean things like novel software applications suddenly have unprecedented trading characteristics that need to be evaluated under existing law. Fortunately, the *Howey* test is based on facts and circumstances and focuses on the economic substance of the transaction, so it should stand the test of time as this disruptive technology changes our daily norms.

Blockchain technology is expanding at a rapid pace. Other jurisdictions like China have taken a very stilted binary approach to regulating token sales by simply banning them because their laws are not developed enough to be useful as a means of preventing bad actors while permitting good actors. Other jurisdictions have aggressively embraced blockchain technology and have instantly become magnets for blockchain entrepreneurs as today's workforce is more mobile than ever.

Over time, this recent spate of irrational exuberance associated with this novel technology will subside and consumptive intent will predominate once again. In that future state, it would not make any sense to have taken a position that all tokens are securities in perpetuity. This would be tantamount to following China's lead as

this would shut down the entire ecosystem, at least here in the United States. Fundamentally, utility tokens are intended to be used as non-securities in a network or application. They could not be used for their intended purpose (*e.g.,* micro payments for micro tasks, or loyalty rewards) if they are categorized as securities under U.S. law, so all of this innovation would need to move offshore and the United States would be one more jurisdiction added to the list of disqualified jurisdictions along with China and New York (because of the overbroad BitLicense). It makes more sense to draw a line today that is grounded in intellectual rigor and analytical consistency, which uses the flexibility of *Howey* to regulate the bad actors while permitting the good actors to continue to innovate with Blockchain technology here in the United States.

The CHAIRMAN. Thank you, Mr. Ness.

The chair reminds Members that they will be recognized for questioning in the order of seniority for Members who were here at the start of the hearing. After that, Members will be recognized in the order of arrival. I appreciate Members' understanding, and I will recognize myself for 5 minutes.

Mr. Ness, I agree with you that if we don't get this right and we flush the innovators offshore into other countries, that getting them back is a lot more difficult. We are at the start of the process with this hearing so that we can get to an answer that doesn't do that.

Ms. Baldet and Mr. Kupor, you each noted that tokens in crypto-networks have the potential to create next generation open Internet protocols. Can you flesh that out a little bit for the laymen and myself that understand the words, but if you can tell us what those actually mean, that would be a little helpful.

Ms. BALDET. Sure, thank you.

When we say *open,* open means a couple things. In this case, we mostly mean open access when we say public blockchains, which means that anyone can join the network. It has to do with the degree of gatekeeping, which is not necessarily an all or nothing kind of a decision. If we start thinking of public blockchains as being more like a public commons, it is a lot more like the Internet wherein you have a lot of choice as to how you access that sort of network.

We also usually mean open source, as Mr. Kupor mentioned, so that we are allowing auditing of that code which increases trust of the code, and most of the core technology that powers the backbone of the Internet is open source.

Mr. KUPOR. I agree with all that. I would just to give you a very specific example, imagine in the future a social network. Today, as users of social networks, of course, you have an intermediary, in many cases, a company like Facebook who obviously is taking and utilizing the consumer data, and then obviously developing relations with advertisers and others as a way to monetize that data. That is their business model.

In the future, utilizing a crypto-network, you can imagine a world where you as the user own your data. That data is cryptographically secured, and you choose which data you want to expose to various advertisers or other promoters, and the flow of economic value in that case, as opposed to going through an intermediary, might be going directly from an advertiser or a promoter of products to you as an individual as you have kind of governed the use of that data. That would be, in very broad terms, a kind of expansive view of what this could look like.

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